

PSYCHOLOGY 262
Behavioral Neuroscience
Fall 2015
TUESDAY AND THURSDAY 3:30-4:45 P.M.

Instructor: Dr. Mitchell Roitman
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Teaching assistant: Ashlynn Gerth
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Required text: Biopsychology, 9th edition, John P.J. Pinel

Website: <http://blackboard.uic.edu>

Behavioral Neuroscience represents the merging of Psychology and Biology. At its core, Behavioral Neuroscience seeks to explain complex behaviors by the physiological processes that underlie them. During the semester you will learn about how behavior is generated in response to events in the world around us. You will gain a significant understanding of the nervous system, how it is organized and how it works. We will cover how our bodies are built to receive information from the senses and turn that information into plans to move our bodies to react to those sensations. We will also cover how the endocrine system, which releases hormones, interacts with the nervous system and influences behavior. Finally, we will consider a biological basis for higher order function (e.g. learning and memory) as well as psychological disorders such as schizophrenia and drug addiction.

Tentative Class Schedule

Week	Date	Topic	Readings
1	8/25	Introduction	Chapt. 1
PART I: FOUNDATIONS OF BEHAVIORAL NEUROSCIENCE			
	8/27	Nervous system overview	Chapt. 3
2	9/01	Anatomy and development of the nervous system	Chapt. 3; Chapt 9; pages 214-221
	9/03	Neural transduction	Chapt. 4; pages 76-85
3	9/08	Neural transduction	
	9/10	Neural transduction/Chemical signaling	Chapt. 4; pages 86-91
4	9/15	NO CLASS	
	9/17	Chemical signaling – II	Chapt. 4; pages 92-99
5	9/22	Genes and Behavior	Chapt. 2
	9/24	Exam I	
PART II: SENSING AND DOING – INTERACTING WITH THE EXTERNAL ENVIRONMENT			
6	09/29	Sensory systems: somatosensory	Chapt. 7; pages 171- 177
	10/01	Somatosensory/Motor systems	Chapt. 8; pages 189- 207
7	10/06	Sensory systems: vision	Chapt. 6; pages 130- 146
	10/08	Sensory systems: vision	
8	10/13	Sensory systems: vision/audition	Chapt. 7; pages 162- 171
	10/15	Sensory systems: audition/gustation	Chapt. 7; pages 179- 183
9	10/20	Exam II	
PART III: HORMONES, HOMEOSTASIS AND BRAIN-BODY INTERACTIONS			
9	10/22	Hormones and behavior: neuroendocrine system	Chapt. 13

10	10/27	Hormones and behavior: sexual behavior	Chapt 13
	10/29	Hormones and behavior: sexual behavior	
11	11/03	Hormones and behavior: eating and drinking	Chapt 12
	11/05	Emotion and stress/sleep	Chapt. 17
12	11/10	Sleep and dreaming	Chapt. 14
	11/12	Exam III	

PART IV: HIGHER ORDER FUNCTION AND MALFUNCTION

13	11/17	Learning and memory	Chapt. 11
	11/19	Learning and memory	
14	11/24	Psychological disorders: drug addiction	Chapt. 15
	11/26	NO CLASS: Thanksgiving	
15	12/01	Psychological disorders	Chapt. 18
	12/03	Psychological disorders	Chapt. 18

* Day in the Life of your Brain paper is due

Further details will be posted to Blackboard at the start of Part IV of the course. In brief, this three-page, double spaced paper is due on the last day of class. For the paper, you will consider some of your daily activities and explain your behavior in terms of their biological bases. You'll incorporate material from at least 3 different lectures and cite slides and/or page numbers from the textbook. No additional materials will be necessary to draft the paper. Again, more detail will be provided later in the semester.

Policies

All exams will be given during the designated date and time stated above (the final exam time will be posted later in the semester). Therefore, there will be **no make-up exams** except for the most serious of documented circumstances. There will be 3 in-class exams each worth 50 points. The final exam will be worth 75 points – 50 points will be dedicated to the new material since the third exam while 25 points will cover material throughout the semester (comprehensive). A 3 page paper entitled "A day in the life of my brain" will be due on 12/03 and is worth 25 points.

There will be no opportunities for extra credit.

ALL exams will be used to calculate your final grade.

The 3-page paper must be turned in by the beginning of the class session (3:30 pm) on 12/03 to receive full credit. The total score on the paper will be reduced by 10% for each day the assignment is late.

It is my hope that each student learns the material and succeeds. Cheating will not be tolerated. Evidence of cheating on any exam will result in that exam's disqualification and a 0 being entered as that exam's result.

You will be tested on lecture material and information from the textbook. Lectures will not be a regurgitation of what is in the textbook. The lectures will only highlight some of the information covered in the text while going into greater detail on other topics. To succeed in this class - and I want you to succeed - you should attend the lectures and read the assigned material. If you do poorly on an exam, you should visit with the T.A. or me. Until exams are graded I cannot give grade-point cutoffs.

Accommodations are available for students who have disabilities. Please notify the TAs or me during the first week of class of any accommodation needed for the course. Concerning disabled students, the University of Illinois at Chicago is committed to maintaining a barrier-free environment so that individuals with disabilities can fully access programs, courses, services, and activities at UIC. Students with disabilities who require accommodations for full access and participation in UIC Programs must be registered with the Disability Resource Center (DRC). Please contact DRC at (312) 413-2183 (voice) or (312) 413-0123 (TDD).

Good luck and enjoy!!!!